

# Examining the Effect of Corruption and Bureaucracy on SMEs Growth in the Kumasi Metropolis of Ghana

## **Kwamena Minta Nyarku (Contact Author)**

University of Cape Coast, School of Business

Email: [knyarku@ucc.edu.gh](mailto:knyarku@ucc.edu.gh)

## **Stephen Oduro**

University of Cape Coast, School of Business

Email: [odurowise@ymail.com](mailto:odurowise@ymail.com)

## **Abstract**

Small and Medium Enterprises (SMEs) are considered a seed-bed of entrepreneurship and innovation in most emerging economies; nevertheless, SMEs sometimes lack an enabling business climate, which hinders their potential growth. This paper examines the effect of corruption and bureaucracy on SMEs growth in the Kumasi Metropolis of Ghana. The study was a quantitative research, and convenience sampling method was employed to select 373 owners/managers as respondents for the study. Employing questionnaire as its main data collection instrument, the study used Gretl version 3.0 Statistical Software for the analysis of data collected. The results of the study revealed that 1% increase in corruption in the SMEs sector leads to 36.12% decline in SMEs growth (sales and employment), and 1% increase in bureaucracy leads to 28.76% decrease in the growth of SMEs. An interesting outcome of the study was that the excessive bureaucratic bottlenecks in the SMEs sector are implied by corruption. We, therefore, conclude that there is a significant negative relationship between corruption and bureaucracy and SMEs growth. It is, therefore, recommended that the government takes a giant-step to fight corruption in the SMEs sector by ensuring transparency and accountability of public officials and also streamline its systems and activities in the sector to reduce the excessive administrative barriers. The present study adds substantial value to the body of research on SMEs as it is the first research to have considered the joint effect of corruption and bureaucracy on SMEs growth in an emerging economy like Ghana.

## 1.0 INTRODUCTION

In Ghana, as in many developing and emerging economies, the significant role of small and medium enterprises (SMEs) to social and economic growth and development is highly underscored. In this respect, SMEs are considered as the necessary mechanisms for realizing such national developmental goals as poverty reduction, democratization and economic participation, job creation, harnessing industrial development and local production, knowledge development, innovation etc. (Urban and Naidoo, 2012; Olawale and Garwe, 2010). Accordingly, the United Nations Industrial Development Organization (UNIDO) hinted that SMEs constitute more than 90% of all businesses that are registered in Africa.

In Ghana, SMEs are estimated to constitute nearly about 85-95% of the private sector businesses, and contribute nearly about 22-70% to Ghana's GDP while accounting for about 85% of the private sector employment (Oppong, Owiredu and Churchill, 2014; Adjei, 2012). Similarly, Beck, Demirguc-Kunt, and Leine (2005) indicated that healthy competition and entrepreneurship development in emerging economies are developed and enhanced through SMEs. Biggs (2003) also postulated that by adding vitality and flexibility to business activities, SMEs help to improve economic performance.

The ability of SMEs to survive and contribute materially to economic growth and development hinges largely on enabling business environment. According to Lumpkin and Dess, (1996), SMEs growth is largely affected by its business climate. Fjose, Green, and Grünfeld (2010), in their study, specify corruption and bureaucracy/red tape as the major constraining factors to SMEs growth. Corruption affects SMEs in terms of business registration and start-up, fees and charges, access to business support services, tax payments, the award of contracts (Ofori, Ato-Mensah, 2015).

The Organisation for Economic Co-operation and Development (OECD) (2012) intimated that SMEs, owing to their size, are incapacitated and severely inhibited by cumbersome bureaucratic procedures in the areas of business set-up, operating and growing a business. Similarly, International Finance Corporation (IFC; 2013) found that the top obstacles to SMEs operations are a poor investment climate, especially bureaucracy/red tape. United Nations Industrial Development Organization (UNIDO) (2012) also hinted that public officials usually asked SMEs to make unwarranted payments in order to circumvent "customs, licenses, taxation, court cases and public procurement."

In its latest report, the Transparency International, a worldwide anti-corruption watchdog, Ghana aggregates 70 out of the 176 economies surveyed, with a score of 43 in terms of corruption perception index. Interestingly, the same report saw Ghana scored 47 in 2015 and 48 in 2014. Corruption perception index measures the

perceived level of public sector corruption worldwide. The report ranks countries on a scale from 0 (highly corrupt) to 100 (very clean), and any score less than 50 means a serious corruption problem. Despite being known for its stability, Ghana has significantly declined, and is plunging into more serious corruptible state year by year. The Doing Business Index ranked Ghana 125 out of the 183 countries surveyed in terms of ease of doing business and starting a business (World Bank Doing Business, 2016). It was reported that it takes 16 procedures and 164 days to complete a business registration in Ghana. The question, therefore, is what impact are these bureaucratic bottlenecks and corrupt practices having on the operation of SMEs in Ghana?

### **1.1 Problem Statement**

In Ghana, like elsewhere, SMEs face certain challenges that militate against their start-up, expansion, and growth. Organizational and individual investors in Ghana, every so often complain about the nature of the regulatory environment, due to the costly and timely procedures to obtain licenses and permits, cumbersome procedures in paying taxes, long procedures in clearing goods from the port, and the unwarranted demands from public officials. As a result, a high proportion of new ventures is closed down during their first years of establishment while others fail to get the permit or approval to commence operation, with only a diminutive number growing up to the large scale enterprises. This study, therefore, seeks to examine the effect of corruption and bureaucracy on SMEs growth in the Kumasi Metropolis of Ghana. Does corruption affect the operations of SMEs in the Kumasi Metropolis of Ghana? Are the aforementioned bureaucratic bottlenecks in acquiring licenses, permits, and registering property among others, affecting the potential growth of SMEs in the Kumasi metropolis of Ghana?

Despite the growing interest of researchers on the factors inhibiting SMEs growth, there is a limited study on the effect of corruption and bureaucracy on SMEs growth in developing countries like Ghana. The focus of previous researchers in Ghana appears to have been skewed on such problems as lack of access to credit, managerial incompetence, inadequate infrastructure, inadequate power supply, etc. (Bouazza, Ardjouman, and Abada, 2014; Hayford, 2012; Sarpong, 2012; Agbor and Quartey, 2010). It goes without saying that the study of Ofori, Ato-Mensah, and Jinsheng (2015), however, considered the impact of corruption on businesses in Ghana, but their study examined corruption impact on foreign direct investment. Study on the impact of bureaucracy on SMEs growth, on the other hand, is yet to appear in the scientific literature.

To this end, the present authors strongly argue that the present study is pioneering in that it is the first to examine the joint effect of corruption and bureaucracy on SMEs growth in emerging economies. Therefore, the

present study fills the identified gap and harnesses the theoretical and empirical studies on SMEs in emerging economies by presenting a holistic conceptual framework on the bureaucratic barriers and corrupt practices affecting the growth of SMEs in Ghana. The rest of the study is structured as below: the literature review, methodology, results and discussion, conclusions and recommendations, and references.

## **2.0 LITERATURE REVIEW**

### **2.1 SMEs Definitions**

Definitions of SMEs differ from country to country and from region to region due to the differing nature of SMEs across countries. This has made it difficult for scholars to come out with a single universally accepted definition for SMEs. Notwithstanding, the statistical definition usually adopted revolves around the number of employees and the total value of assets owned by these SMEs. As an example, some international organisations such as the European Union (EU) reckons enterprises with total number of employees not exceeding 50, and turnover not greater than ten million Euros as small firms; and enterprises with employment not greater than 250, and asset turnover not exceeding fifty million Euros are categorized as medium enterprise. Countries such as Singapore defines SMEs as firms with employment size not exceeding 200 persons, and asset turnover not exceeding \$15,000. France also defines SMEs as firms with employment size less than 250 employees.

In Ghana, some institutions such as Ghana Statistical Service (2003) categorized small enterprises as firms with employment size between 5-29, and an annual turnover not exceeding \$100,000; and medium enterprises with employment size between 30-99, and an annual turnover not exceeding US\$1million. In another view, the National Board for Small Scale Industries (NBSSI) categorizes small-scale enterprises as enterprises with the number of employees not more than 9 workers, and plant and machinery (excluding land, buildings, and vehicles) not exceeding 10 million Ghanaian Cedis. The institution, however, defines micro enterprises as firms with the number of employees less than 5. The present study adopted the definition provided by Ghana Statistical Service since the focus of this study is on small enterprises as well as medium enterprises.

#### **2.1.1 Corruption and SMEs**

In recent years, corruption has become a hot topic in Ghana. As evidently disclosed by the Corruption Perception Index in the preceding three years (International Transparency report 2016, 2015, 2014), corruption now appears to be one of the biggest challenges affecting Ghana's economic growth and development endeavors.

By definition, corruption is defined “as the misuse of public office for private gain” (World Bank, 2000). Along the same line of thought, Wraag et al. (2009, p. 5) define corruption as “an inducement to show favour” and “the perversion of destruction of integrity in the discharge of public duties by bribery of favour.” This implies that corruption involves any attempt by a person to use entrusted power to advance personal and selfish advantages.

Corrupt practices such as extortion, bribery, fraud, embezzlement, to mention but a few, are perceived at all echelons of governance, even in the private sector institutions. No wonder, then, that His Excellency President Akufo Addo, vehemently stated in his state of the Nation Address, February 21, 2017, that corruption is one of the key menaces that his administration resolves to crack. In fact, during a launch of the book “Making Africa Work” by Greg Mills, Jeffrey Herbst, Olusegun Obasanjo, and Dickie Davis, on July, 29, 2017, the president re-echoed his words indicating that “corruption undermines the ability of the government to create jobs and that a major opportunity for job creation, is by dealing with corruption” (ultimatefmonline.com). In this respect, corruption affects both social and economic life in a country: socially, it creates social disorder, unrest, and poor provision of social services; and economically, it raises the cost of doing business to the public and private investors (Ofori, Ato-Mensah, and Jinsheng, 2015).

The question of whether corruption poses a huge threat to SME and entrepreneurship growth and development in developing countries has not received a conclusive answer in the literature. While some studies discovered a negative correlation between corruption and SMEs growth, others found a positive relationship. As a case in point, Aidt (2008) opined that corruption has a large negative influence on entrepreneurship growth and development. Gaviria (2002) also posited that corruption enormously diminishes sales growth, and again hampers the employment growth of SMEs (Aterido et al., 2007). Sharing the same view, Kanu (2015) postulated that a significant negative relationship exists between corruption and SMEs growth in terms of sales and employment.

Athanasouli et al. (2012) indicated that corruption is negatively correlated to SMEs growth. Ofori, et al. (2015), in their study on the impact of corruption on foreign direct investment in Ghana, revealed that corruption has a significant negative influence on foreign direct investment inflows in Ghana. Interestingly, Oppong, Owiredo, and Churchill (2014) remarked that a high rate of corruption in Ghana affects the record keeping of SMEs. They further argued that improper record keeping leads to none payment of fees and taxes to the government. As maintained by Daniel and Ahmad (2013), corruption serves as a monetary constraint to SMEs and upsurges the cost of doing business. These prior related studies reveal that corruption has the potential of undermining the potential growth of SMEs.

Surprisingly, some studies found a positive correlation between corruption and SMEs growth. The study of Aterido et al. (2007), for instance, disclosed that corruption particularly bribes, enhance the growth of SMEs with the number of employees below 10. That is, corruption is conducive for small businesses. Additionally, Houston (2007) disclosed that corruption has a significant positive impact on growth in economies that have a weak regulatory enforcement and rule of law. Similarly, UNIDO (2012) hinted that corruption may be advantageous to SMEs when the bribe paid is for the purpose of winning a contract.

Kanu (2015) also opined that corruption may be beneficial to SMEs if the payment is made to circumvent bureaucratic barriers. The problem, however, is where do these monies end up? Also, what happens to the SMEs which cannot pay “tip” or “dash” to circumvent excessive bureaucratic barriers? These inconclusive results on the link between corruption and SMEs growth largely show the indispensable role of the present study to the body of knowledge. In the light of these inconclusive findings, the present authors formulate the following hypothesis:  
H1: There is a significant positive relationship between corruption and SMEs growth.

### **2.1.2 Bureaucracy and SMEs Growth**

Some studies have shown that bureaucracy in government administrative system in terms of business registration, issuing licenses and permits, procurement, tax payment etc. may pose a strong regulatory barrier to SMEs growth (Bouazza, Ardjouman, and Abada, 2015; Mashenene and Rumanyika, 2014). Bureaucracy, also known as red tape, involves the inflexible rules and procedure and overly complicated regulation in administrative systems. Wherever present, bureaucracy slows down systems and operations. In Ghana, bureaucracy is very rife in the public sector, and this has even led some scholars to argue that the high incidence of corruption in the public sector is as a result of “the excessive bureaucratic system” (Ofori, et al., 2015). Since these bureaucratic bottlenecks are not limited to only one sector of the economy, SMEs tend to get their share of the pie in their attempt to secure the services and support of the institutions mandated for the regulation of SMEs in the country.

Writing on the menace of bureaucracy, the Bankok Post (1997) in Fiestas and Sinha (2011) highlighted that “the paper work involved is mountainous and when correctly filled out and properly submitted with the requisite fees, getting the paper signed, stamped and approved adds a new dimension to the term ‘red-tape.’” This pictures how bureaucracy in administrative systems may pose potential threat to speedy growth of SMEs in an economy. Additionally, Bouazza, Ardjouman, and Abada (2014) intimated that arduous processes and requirements to start a business are a serious problem for SMEs in developing economies. For that reason, valuable time is spent by investors to obtain license, clear goods from the port, register property, and even move collateral.

According to World Bank (2016), these bottlenecks in the public administrative systems reduce the entry and growth rate of SMEs. Supportively, Fiestas and Sinha (2011) stated that delays in the enforcement of contracts weaken the opportunities and incentives to invest since enterprises may not be willing to involve themselves in long term and complicated commercial contracts. As Hayford (2012) maintained, bureaucracy affects the ability of the enterprises to secure the needed credit for their business start-up and expansion, which slows the rate of SMEs growth in an economy. Chang, Kaltani, and Loayza (2005) also intimidated that bureaucratic barriers may decrease the entrepreneurial drive and instincts of citizens in a given country. Based on these reviews, the under mentioned hypothesis is proposed:

H2: There is a significant positive relationship between bureaucracy and SMEs growth.

### **2.1.3 SMEs Growth**

The literature does not provide an exact definition for enterprise growth. This way, enterprise growth has been explained as the firm's ability to increase its sales, profit, employment, asset turnover, new product lines, diversifications etc. (Yeboah, 2015). This implies that the variables that are used to measure enterprise growth double to provide a definition for enterprise growth. Thus, the authors of this present study define enterprise growth as the potential of an enterprise to generate sufficient returns from its business investment or activities in a way that enable the firm to operate into the foreseeable future, from the introductory phase of the industry life cycle through to the decline phase.

Howard (2006) in Yeboah (2015) postulated that SMEs undergo seven stages of growth: product and service development, expansion, professionalism, consolidation of activities, diversification, integration, and decline and revitalization. The first stage, product and service development is the period when the business is small and is testing the waters to gain root. The second stage, expansion, is when the firm begins to increase its sales, revenues, market share, and employees. Professionalization, which is the stage three, is where the firm begins to formalize its operation and defines its organisation structure. Stage four involves the point where the firm consolidates activities and tries to solve problems faced by the firm. Diversification, the fifth stage, is where the firm begins to develop new markets and products which may or not complement its existing operations. Stage six is the integration stage where the firm focuses attention on building infrastructures to host its diversified operations and business units. Stage seven, which is the last stage, is the decline and revitalization stage where the firm attempts to rebuild and reorganize the whole organization for continued survival and growth (Howard, 2006).

According to (Tundi and Tundi, 2012; Yeboah, 2015; Delmar, Davidson, and Gartner, 2003), SMEs growth may be measured using growth indicators such as sales level, profit, asset turnover, employment, the number of branches, new product lines, market share, increase in physical output. Prior related studies have, however, identified some pros and cons of these growth indicators. For instance, Delmar, Davidson, and Gartner (2003) argue that market share, increase in physical output, and asset turnover are not used frequently by researchers to measure SMEs growth due to the variability across industries, and also the difficulty involved in ascertaining such results. They also argue that profit may be an appropriate growth indicator to measure the firm size and long-term prospective. In their view, sales and employment should be used to measure SMEs growth, and that a single growth indicator should not be used to measure firm growth.

Sharing the same view, Yamoah, Arthur, and Abdullai (2013) maintained that employment is a vital growth indicator since the key concern of most governments is curbing the menace of unemployment. Besides, it is easier to ascertain the number of employees in a particular firm. They further argue that sales are easier to measure compared with other performance indicators largely due to the fact that the SMEs owners or managers attach much importance to sales. In view of these expositions, the present study adopted sales and employment as growth indicators to measure SMEs growth in the Kumasi Metropolis of Ghana.

## **2.2 Conceptual Framework**

Based on the extensive review of the literature, the corrupt practices and bureaucratic barriers militating against SMEs growth were identified. These provide the theoretical bedrock for the present study. In this paper, the dependent variable is the SMEs growth, which is measured by sales and employment. It is hypothesized that this dependent variable is strongly affected by the independent variables (bureaucracy and corruption). These variables have been chosen on the foundation of theoretical and empirical significance. Therefore, the proposed conceptual framework displayed in figure 1 shows the effect of corruption and bureaucracy on SMEs growth in the Kumasi Metropolis of Ghana.



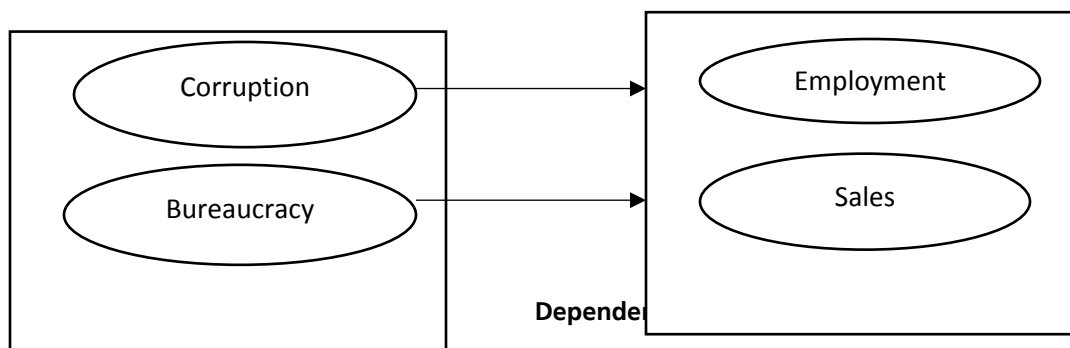


Figure 1: Nyarku and Ofori's conceptual framework

### 2.3 Theoretical Framework

The present study adapted the theory of firm growth by Penrose (1959) and the political theory of entrepreneurship by Hoselitz (1952) as its underpinning theoretical foundation. The theory of firm growth is concerned with how firms grow over time and how fast they do grow. According to Penrose, there are important administrative constraints (internal and external) that may hamper the speedy growth of firms. Internally, she argued that the firm's ability to grow depends on its size as well as the innovative and managerial resources of the enterprise. Externally, she stressed that such factors as market conditions, culture, legal and regulatory limitations such as bureaucracy, corruption, complex tax systems etc. may affect the speedy growth of an enterprise. Penrose argued that failure or ignorance on the part of SMEs to identify these factors may lead to loss of significant competitive advantage.

The political theory of entrepreneurship, along with the same line of thought, postulates that, in order for SMEs and business organisations to make a meaningful and significant contribution to economic growth and development, governments must create an enabling business environment for them. According to Hoselitz, the political and legal systems in an economy are vital for nurturing SMEs and entrepreneurs. According to him, the government commitment to enhancing tax systems, financial laws, adequate infrastructure, flexible business registration and regulations, flexible customs and port regulations, corrupt-free systems etc. are the vital ingredients for promoting the entrepreneurial drive of its citizenry.

## 2.0 METHODOLOGY

The present study adopted a cross-section survey research design. This was to succor the present authors to examine and test statistically, the substantial effect of corruption and bureaucracy on SMEs growth in Ghana. Data was collected from SMEs from various cross- sections of manufacturing, trade, commerce, and service industries within the Kumasi Metropolis. The study was quantitative in nature. Quantitative research approach, according to Engstrom and Saheli-Sangari (2007), evaluates how people feel, think, and act in a specific manner, and is a research approach that quantity data and explains statistical significance of a phenomenon. The population of the study consisted of 4542 registered SMEs in the Kumasi Metropolis of Ghana. Of this, a sample size of 378 was selected for the study. Since this study involved a regression analysis, specifically, linear regression analysis, the appropriateness of the chosen sample size is supported by Tabacknick and Fidell (1996), who advocated that a minimum sample size for any regression analysis study must be  $N > 50 + 8M$ , where "M" denotes the number of explanatory variables (independent variables).

In this study, there were two main explanatory variables; corruption and bureaucracy. Following their suggestion, our sample size must be more than 66, and 378 is greater than 66, hence our sample size meet their recommendation. A convenience sampling method was used to select the 378 respondents. This approach, because as noted by Malhotra (2007), convenience sampling enables researchers to select respondents who are available and willing to participate in the study. The respondents were owners or managers of the SMEs. A response rate of (98.68%) was recorded for study. Hence, of the 378 sample, 373 were used for analysis, indicating that 5 questionnaire items were not returned.

The main data collection instrument was a self-administered questionnaire. A questionnaire was used since it is less costly and time consuming, and the view that self-administered questionnaire enables respondents to answer the questions at their own pace (Monsen and Van-Horn, 2008). The questionnaire item was divided into 4 sections: Section A (Socio-demographic information), Section B (effect of corruption of SMEs growth), Section C (effect of bureaucracy on SMEs growth), and Section D (SMEs growth indicators). Section B and C were measured using a four-point ordinal interval scale, with choices: 1=Crucial Limitation, 2= Important Limitation, 3= Moderately Important Limitation and 4= Not Important Limitation. This way, the respondents were required to indicate the corruption and bureaucratic variables that they consider as having significant negative impact on their business

growth. The Section C was measured using a three-point likert scale, with options 1=increased, 2=remained the same, and 3=decreased. As indicated earlier, the growth indicators used in this study are sales and employment; hence, the owner/managers were to indicate their sales and employment growth over the past 5 years. The questionnaire was administered within a period of one month.

In order to ascertain the reliability and validity of the chosen scale, a pre-test was carried out prior to the main data collection. SMEs owners/managers in the Cape Coast metropolis of Ghana with similar features as those involved in the main population were used for the pilot-test. A sample of 30 SMEs was used for the pre-test. As indicated by Selltitz, Wrightsman, and Cook (1976), Cronbach's alpha enables researchers to measure the reliability of a measuring scale. In pre-testing the chosen scale, a Cronbach alpha of (0.798) was obtained. As a rule of thumb, a Cronbach coefficient greater than or equal to (0.7) is deemed good and appropriate. Thus, our measurement scale is reliable. The data collected was edited, coded and analysed using Gretl version 3.0 statistical software. Both descriptive and inferential statistics were used to analyse and interpret the effect of corruption and bureaucracy on SMEs growth.

## **4.0 RESULTS**

### **4.1 Socio-Demographic Information**

The socio-demographic variables considered in this study were gender, age, nature of the business, a sector of the business, and a number of years in business. The analysis displayed that majority of the respondents 206, constituting 55.23%, were males while 167, constituting 44.77%, were females. This, by innuendo, shows that majority of the owners/managers of SMEs in the Kumasi Metropolis are males. Thus, it can be argued that the SMEs sector is still dominated by male entrepreneurs. The analysis of the age structure of the respondents revealed that 26.0% were within the age group of 21-30; 33.78% were between 31-40; 22.25% were within 41-50; 14.20% belonged to the age group of 51-60, and 3.75% were 60 and above. This clearly purports that majority of the owners/managers were within the age group of 31-40, indicating the maturity, work efficiency, and potential success from early innovation. Concerning the nature of business, the analysis shows that 137, constituting 36.73%, were sole proprietorship; 93, constituting 24.93%, were joint-venture, 104 (27.61%) was a partnership; and 39, constituting 10.45%, were companies. This implies that majority of the respondents were sole proprietors, denoting that SMEs in Ghana are still dominated by sole proprietorship. Further to this, the analysis shows that majority of the SMEs 173 (46.38%) were in the service sector; followed by manufacturing 124 (33.24%), and then

Agriculture 76 (20.38%). Finally, the analysis disclosed the number of years the SMEs have been in business. It was observed that majority of the SMEs, constituting 127 (34.05%), have been in business for 6-10 years while 103 (27.61%), 81 (21.72%), 33 (8.85%), and 29 (7.77%), have been in business between 11-15years, 16-20 years, 1-5years, and above 20 years respectively.

#### 4.2 The Regression Analysis

The present study used Ordinary Least Square (OLS), specifically linear regression analysis to examine the relationship between the independent variables and the dependent variable. The main regression model was:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$$

Where;

Y = SMEs Growth (Dependent Variable)

X<sub>1</sub> – Corruption (Independent variable)

X<sub>2</sub> = Bureaucracy (Independent variable)

β<sub>0</sub> = Co-efficient of the model

β<sub>1</sub> – β<sub>2</sub> = Beta Coefficients of Determination

ε = Stochastic Error Term.

Table 1 shows the summary of the output from the regression analysis.

**Table 1: Model Summary**

R-Square	R-Square Adjusted	Std. Error of Regression
0.529122	0.526570	0.740985
Test of normality of residuals; Shapiro Wilk test; t-value = 0.4807 p-value = 0.78698		
Test of Heteroscedasticity; White's test; t-value 0.1649		P-value 0.8691

Source: Authors' Own Survey (2017)

As displayed in Table 1, it is evident that R-square, which measures the overall goodness of fit of any regression model, is 52.91%. This shows that 52.91% of the variability in the dependent variable (SMEs growth) is explained by the explanatory variables (corruption and bureaucracy) considered in this study. Thus, our model moderately explains the variability in the dependent, indicating that there are other factors that may influence SMEs growth, but which were not considered in this model. Regarding the normality of the residuals of the model, the null hypothesis is that error is normally distributed. The p-value of 0.78698 is large, and therefore, we can accept the normality of our model. Again, Table 1 shows that heteroscedasticity is not present in our model. The null hypothesis under the White's test is that heteroscedasticity is not present. Thus, the p-value of 0.8691 is large;

hence we accept that homoscedasticity is present in our model. The variance is not dependent on the explanatory variables/predictors or anything (constant variance). Table 2 shows the relationship between the independent variables and the dependent variable of the regression model.

**Table 2: Regression Analysis Output**

Predictors	coefficient	std. error	t-ratio	p-value	95% confidence interval	
Constant	0.609930	0.170784	3.571	0.0004***	0.24099	0.255761
Corruption	-0.361196	0.0378962	-9.531	2.67e-55***	-0.08667	-0.075667
Bureaucracy	-0.287642	0.0390500	-7.366	1.11e-48 ***	-0.590854	-0.444431

Source: Authors' Own Survey (2017)

As a general rule, the statistical significance of any regression model or coefficient is usually defined using the appropriateness of signs while t-value and p-value are employed in assessing the predictors/explanatory variables. But in order to establish the percentage (%) effect (instead of a unit, since we cannot measure corruption or bureaucracy in currency terms) of the independent variables on the dependent variable, we employed log transformation. Hence, the log transformation output of the regression model is displayed below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon.$$

$$Y = 0.609930 + -0.361196 X_1 + -0.287642 X_2$$

The stochastic error term was assumed to be zero. Therefore, it can be gleaned from the fitted model that if all the explanatory variables in the model were constant or equal to zero, SMEs growth in terms of employment and sales will be 0.609. That is the expected growth rate of SMEs in the absence of corruption and bureaucracy in administrative systems. Again, it is evident from Table 2 that there is a negative correlation between corruption and SMEs growth. It is seen that a 1% increase in corruption leads to 36.12% decrease in SMEs growth. Also, there is a negative relationship between bureaucracy and SMEs growth.

The regression model shows that 1% increase in bureaucratic bottlenecks leads to 28.76% decrease in SMEs growth. The p-value test (2.67e-55\*\*\*) indeed shows that there is a significant negative relationship between corruption and SMEs growth in terms of employment and sales. Further to this, the p-value test of (1.11e-48 \*\*\* ) indicates a significant negative correlation between bureaucracy and SMEs growth. Thus, the independent variables were found to have a negative effect on the dependent variable. Table 3 shows the ANOVA analysis of the regression model.

**Table 3: ANOVA Analysis**

	Sum of Squares	df	Mean Square	F-Test	Sig.
Regression	227.663	2	113.832	207.3213	4.48e-61***
Residual	202.603	371	0.549059		
Total	430.266	373	1.15975		

Source: Authors' Own Survey (2017) \*\*\*8Significant at 5% alpha level

Table 3 shows F-test value of (207.32) and P-value of (4.48e-61\*\*\*). This, by inference, implies that at 95% confidence interval, the probability that our regression model gives a wrong prediction is less than 4.48e-61\*\*\* (i.e. .0.0+61 0s). Therefore, we confidently conclude that our regression model is appropriate prediction model for explaining the effect of corruption and bureaucracy on SMEs growth in the Kumasi Metropolis of Ghana. Also, since F-test shows the joint-significant of the independent variables on the dependent variables, we can argue that there is a significant negative relationship between the independent variables (corruption and bureaucracy) and SMEs growth (sales and employment).

#### 4.3 Discussion of Results

The overarching objective of the present study was to examine the effect of corruption and bureaucracy on SMEs growth in the Kumasi Metropolis of Ghana. The first hypothesis (H1) of the study states that there is a significant positive relationship between corruption and SMEs growth. As the findings reveal, with a p-value of (2.67e-55\*\*\*), we can reject the null hypothesis, and accept the alternate hypothesis that there is instead, a negative correlation between corruption and SMEs growth. This result is in tandem with prior related studies (Aidt (2008; Gaviria, 2002; Athanasouli et al., 2012) that argue that corruption negatively affects SMEs growth. Also, the result complements the findings of (Kanu, 2015; Aterido et al., 2007; Ofori, Ato-Mensah, and Jinsheng, 2015; Oppong, Owiredu and Churchill, 2014), who disclosed in their study that there is a significant negative relationship between corruption and SMEs sales and employment growth.

Nevertheless, the result of this study is inconsistent with the findings of (Houston (2007; UNIDO, 2007), who argue that corruption may be good for SMEs if it helps them to win contracts and to circumvent bureaucratic barriers. The findings disclose that, a 1% increase in corruption leads to a 36.12% reduction in SMEs growth. The result shows that corruption lowers the sales and employment growth of the SMEs. The respondents revealed that some government officials illicitly take money from them before they agree to test their products/services, issue

license, and permit, and register their properties on time for them. The implication is that corruption is not conducive for SMEs in the Kumasi Metropolis of Ghana.

Again, the second hypothesis (H2) that there is a positive correlation between bureaucracy and SMEs growth is not supported at a p-value of (1.11e-48 \*\*\*). Thus, there is a negative significant relationship between bureaucracy and SMEs growth. This result is in line with the findings of (Bouazza, Ardjouman, and Abada, 2014; Fiestas and Sinha, 2011; Hayford, 2012) that argue that bureaucratic bottlenecks in public administrative systems leads to delays in enforcing contracts, issuance of license and permit to SMEs, clearing of goods from ports, trade restrictions, and securing credit from public financial institutions. The result of the study is, again, consistent with the studies of (World Bank, 2016; Chang, Kaltani, and Loayza, 2005) that argue that bureaucratic barriers reduce the entry and growth rate of SMEs, and decreases the entrepreneurial drive and instincts of citizens in a given country.

The present study found that a 1% increase in bureaucratic bottlenecks in public administrative systems leads to 28.76% decline in the growth of SMEs in the Kumasi Metropolis of Ghana. An interesting finding from the present study was that bureaucratic bottlenecks in the government administrative systems are implied by corruption. The respondents revealed that in order for them to get things done on time, they have to pay “something” to grease the palms of the public officials. This appears to confirm the argument of (Ofori, Ato-Mensah, and Jinsheng, 2015) that the high incidence of corruption in Ghana is the reason for the “excessive bureaucratic systems.”

Kanu (2015) argued that corruption may be good for SMEs to circumvent excessive bureaucratic barriers, but as the findings disclose a contradictory case for SMEs in the Kumasi metropolis of Ghana, as this has decreased their sales and employment growth. Thus, the bureaucratic barriers and corrupt practices are rather killing the entrepreneurial drive of the owners or managers since some of them are not willing to succumb to the illegitimate requests of the public officials while others do not even have the means to pay bribes in order to grow their businesses. The resulting effect is that bureaucracy is slowing the sales and employment growth of the SMEs.

## **5. CONCLUSIONS AND RECOMMENDATIONS**

Based on the results and discussions revealed above, the under mentioned conclusions and recommendations are proposed. The outcomes of the study are hoped to provide insight into the effect of corruption and bureaucracy on SMEs growth in Ghana. Within this study, it is disclosed from the regression analysis that there is a significant negative correlation between corruption and SMEs growth (sales and employment) and

that 1% increase in corruption leads to 36.12% decline in SMEs employment and sales growth. The findings, moreover, has shown that there is a significant negative relationship between bureaucracy and SMEs growth (sales and employment) and that 1% increase in bureaucratic bottlenecks leads to 28.76% decrease in SMEs growth.

The findings have shown that the cumbersome bureaucratic procedures in terms of license issue, custom and trade restriction, permits etc. are implied by corruption. It is, thereby, concluded that corruption and bureaucracy negatively affect SMEs growth in the Kumasi Metropolis of Ghana. Thus, to reduce the high unemployment rate in Ghana, the government should resolve to curb corruption and bureaucracy in the SMEs sector.

The current authors, therefore, recommend that the government put systems and mechanisms in place to harness anti-corruption initiatives and policies at all levels of governance, specifically those mandated for the promotion of entrepreneurship, SME growth and investment in the country. Thus, by ensuring transparency in government activities, holding public officials accountable for maladministration, setting up independent judiciary to handle corruption cases, and by limiting the unrestricted power of public officials to award contracts, the government can reduce the menace of corruption that has pervaded every sector of the economy, including the SMEs sector.

Also, the government should streamline its systems and activities in a way that facilitate the smooth operation of SMEs in terms of business registration, property register, goods clearance, tax payment etc. The government, for example, can reduce the bureaucratic barriers in part by making it possible for SMEs to perform some activities such as business registration, property registration etc. online. The government should also decentralize the regulations of SMEs so as to ensure that they are well-spaced throughout the country. This is hoped to reduce the long procedures and process that the SMEs go through and the time spent in their quests to secure government services from the central administration.

The present study contributes to the body of research by being the first to have considered the joint effect of corruption and bureaucracy on SMEs growth in emerging economies like Ghana. Thereby, the present study fills a research gap vis-à-vis the effect of corruption and bureaucracy on SMEs growth. That being said, the study is hoped to help developing countries that recognize SMEs as the seed-bed of innovation and economic growth to identify the potential impact of corruption and bureaucracy on SMEs growth and the measures to curb them.

The study had some limitations. The sample size did not include all the SMEs in the country. It was limited to only SMEs in the Kumasi metropolis of Ghana. Thus, future research should consider SMEs in the other regions



of Ghana. Again, the study only considered two predictors (corruption and bureaucracy) and two dependent variables (sales and employment). Future research, therefore, should consider the effect of other factors such as tax, trade regulation etc. on different SMEs growth indicators (productivity, price, profit). Lastly, the present study was quantitative. Future studies should employ a qualitative research approach to afford the owners/managers more opportunity to express their opinion on the phenomenon.

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